

In the Claims

1-20 (Canceled).

21 (Currently Amended): A method for preparing a gamma delta ($\gamma\delta$) T lymphocyte composition comprising culturing a biological preparation comprising a blood sample or a cytapheresis sample comprising at least 50 million mononuclear cells in the presence of a synthetic activator compound of gamma delta T lymphocytes selected from phosphohalohydrins, phosphoepoxides, pyrophosphates, biphosphonates or bisphosphonates and a cytokine selected from IL-2 or IL-15 and maintaining the cells at a density less than about 5×10^6 cells/ml during said culturing step.

22 (Canceled).

23 (Previously Presented): The method according to claim 22, wherein the biological preparation is from a cytapheresis.

24 (Previously Presented): The method according to claim 21, wherein the biological preparation comprises more than 10×10^7 cells.

25 (Previously Presented): The method according to claim 21, wherein the biological preparation has previously been frozen.

26 (Canceled).

27 (Previously Presented): The method according to claim 21, wherein the cells are cultured for a time period greater than or equal to about 10 days.

28 (Previously Presented): The method according to claim 27, wherein said cells are cultured between 10 and 25 days.

29 (Previously Presented): The method according to claim 21, wherein the synthetic activator compound of gamma delta T lymphocytes is a ligand of the T cell receptor of said gamma delta T lymphocytes.

30 (Previously Presented): The method according to claim 29, wherein the synthetic activator compound of said gamma delta T lymphocytes is selected from the group consisting of phosphohalohydrin compounds, phosphoepoxide compounds and bisphosphonate compounds.

31 (Previously Presented): The method according to claim 30, wherein the synthetic activator compound of said gamma delta T lymphocytes is selected in the group consisting of the following compounds:

3-(bromomethyl)-3-butanol-1-yl-diphosphate (BrHPP);
3-(iodomethyl)-3-butanol-1-yl-diphosphate (IHPP);
3-(chloromethyl)-3-butanol-1-yl-diphosphate (ClHPP);
3-(bromomethyl)-3-butanol-1-yl-triphosphate (BrHPPP);
3-(iodomethyl)-3-butanol-1-yl-triphosphate (IHPPP);
 α,γ -di-[3-(bromomethyl)-3-butanol-1-yl]-triphosphate (diBrHTP);
 α,γ -di-[3-(iodomethyl)-3-butanol-1-yl]-triphosphate (diIHTP);
3,4,-epoxy-3-methyl-1-butyl-diphosphate (EpoX-PP);
3,4,-epoxy-3-methyl-1-butyl-triphosphate (EpoX-PPP); and
 α,γ -di-3,4,-epoxy-3-methyl-1-butyl-triphosphate (di-EpoX-TP).

32 (Currently Amended): The method according to claim 21, wherein the cytokine is IL-
~~2 selected in the group consisting of interleukin 2 and interleukin 15.~~

33 (Previously Presented): The method according to claim 21, wherein the cytokine is used at a concentration between about 150 U/ml and about 500 U/ml.

34 (Previously Presented): The method according to claim 21, wherein said method produces a composition of gamma delta T lymphocytes having the following characteristics:

said composition comprises more than 80 % gamma delta T cells, and

said composition comprises more than 100 million viable and functional gamma delta T cells.

35 (Withdrawn): A method for enriching the population of functional gamma delta T lymphocytes in a biological sample comprising culturing cells from a cytapheresis in the presence of a synthetic activator compound of gamma delta T lymphocytes.

36 (Withdrawn): The method according to claim 35, further comprising the addition of a cytokine selected from the group consisting of interleukin-2 and interleukin-15.

37 (Withdrawn): The method according to claim 35, wherein said cells are cultured under conditions that ensure that cell density is maintained at essentially below 5×10^6 cells/ml.

38 (Withdrawn): The method according to claim 36, wherein said cytokine is added one to 72 hours after the culturing of said cells is initiated.

39 (Withdrawn): The method according to claim 36, wherein said cytokine is added to said culture of cells at the time culturing of said cells is initiated.

40 (Withdrawn): The method according to claim 35, further comprising the step of recovering some or all of said gamma delta T lymphocytes.

41 (Withdrawn): The method according to claim 40, further comprising formulating said recovered gamma delta T lymphocytes into a pharmaceutically acceptable composition.

42 (Withdrawn): The method according to claim 38, further comprising the step of recovering some or all of said gamma delta T lymphocytes.

43 (Withdrawn): The method according to claim 42, further comprising formulating said recovered gamma delta T lymphocytes into a pharmaceutically acceptable composition.

44 (Withdrawn): The method according to claim 39, further comprising the step of recovering some or all of said gamma delta T lymphocytes.

45 (Withdrawn): The method according to claim 44, further comprising formulating said recovered gamma delta T lymphocytes into a pharmaceutically acceptable composition.

46 (Withdrawn): A composition comprising a population of cells comprising more than 80% functional gamma delta T lymphocytes and comprising more than 100 million gamma delta T lymphocytes and a carrier or excipient.

47 (Withdrawn): The composition according to claim 46, further comprising human serum albumin.

48 (Withdrawn): The composition according to claim 46, further comprising a cytokine selected from the group consisting of IL-2 and IL-15.

49 (Withdrawn): A method of stimulating the immune defenses of a subject comprising the administration of a composition comprising a population of cells composed of more than 80% functional gamma delta T lymphocytes, more than 100 million gamma delta T lymphocytes and a carrier or excipient to said subject.

50 (Withdrawn): The method according to claim 49, wherein said method treats an infectious disease, a parasitic disease, or cancers.

51 (New): The method according to claim 21, wherein said synthetic activator compound is 3-(bromomethyl)-3-butanol-1-yl-diphosphate (BrHPP) and said cytokine is IL-2.

52 (New): The method according to claim 21, wherein said cytokine is IL-15.